US-PAT-NO: 4654889

DOCUMENT-IDENTIFIER: US 4654889 A

TITLE: Multi-star fiber optic network with improved access time

---------- KWIC ---------

Detailed Description Text - DETX (28):

FIG. 5C illustrates an example of channel B data receiver 138 (FIG. 4B) when amplitude modulation is employed to obtain the optical channels. In FIG. 5C, bandpass filter 150 receives signals from amplifier 136 (FIG. 4B). Filter 150 is tuned to pass the B frequency, such as 7 MHz. The output of filter 150 is provided to envelope detector 152 and thence to data regenerator 154, such as a comparator or Schmidt trigger. For channel C data receiver 140, filter 150 would be tuned to the C frequency, and for a channel A data receiver it would be tuned to the A frequency.

Detailed Descripti

US-PAT-NO: 5712716

DOCUMENT-IDENTIFIER: US 5712716 A

TITLE: Telecommunication system and method for wavelength-division multiplexing transmissions with a controlled separation of the outgoing channels and capable of determining the optical signal/noise ratio

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Abstract Text - ABTX (1):

A multi-wavelength optical telecommunication method includes the steps of generating at least one optical transmission signal in a predetermined wavelength band, transmitting the optical transmission signal through an optical fiber to a receiving station, receiving the optical transmission signal through a passband filter and filtering the signal to let the transmission signal alone pass. The wavelength band is scanned in order to identify in the band a recognizable portion of the optical spectrum being received, thus determining, based on the operating conditions corresponding to said recognizable spectrum portion, a search range of said transmission signal within which the transmission signal is searched out and recognized based on its spectral profile.

Brief Summary Text - BSTX (14):

In one aspect, the present invention relates to a method and an apparatus for receiving transmission signals in a WDM system, in which the passband of an

optical filter is continuously checked and adjusted by recognizing a sure reference value in the scanned wavelength band and, based on this recognition, the fine search range of the desired channel is detected, which range is recognized based on its spectral profile in the absence of check signals overlapped therewith.

L Number	Hits	Search Text	DB	Time stamp
1	0	scan$4 near6 (band near4 wavwlength$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:36
2	216	scan$4 near6 (band near4 wavelength$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:36
3	15	(optic$3 near5 signal$2) same (scan$4 near6 (band near4 wavelength$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:13
4	9	398/$.ccls. and (scan$4 near6 (band near4 wavelength$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:14
5	2	(398/$.ccls. and (scan$4 near6 (band near4 wavelength$3))) not ((optic$3 near5 signal$2) same (scan$4 near6 (band near4 wavelength$3)))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:56
6	26787	(bandpass adj filter$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:44
8	6670	signals with ((bandpass adj filter$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:15
9	860	(398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:15
10	202	(bandpass adj filter$3) with node$2	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:16
11	21	398/$.ccls. and ((bandpass adj filter$3) with node$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:16
7	860	398/$.ccls. and ((bandpass adj filter$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:26
12	839	((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:34
13	252	(((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:10
14	66	(bandpass adj filter$3) with (double adj sideband$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:44
16	44	((bandpass adj filter$3) with (double adj sideband$2)) and (frequenc$4 near6 detect$4)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:46
17	1	(((bandpass adj filter$3) with (double adj sideband$2)) and (frequenc$4 near6 detect$4)) and (optic$3 near4 signal$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:47
15	1	((((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)) and ((bandpass adj filter$3) with (double adj sideband$2))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:49
18	23395	tunable	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11
19	19098	(tune$3 or tunable) with filter$3	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11
20	82	((((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)) and ((tune$3 or tunable) with filter$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11

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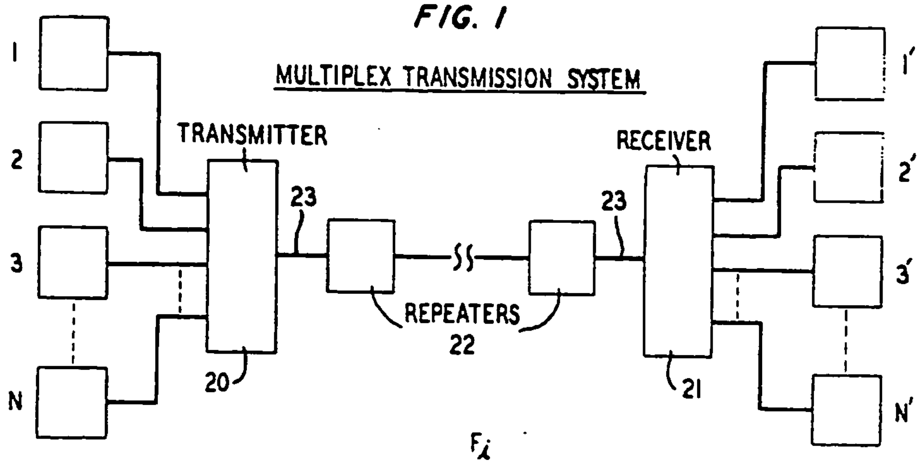
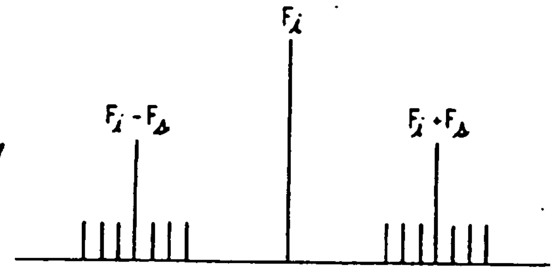
FIG. 1

MULTIPLEX TRANSMISSION SYSTEM



ok for claim 1, 2 & 3

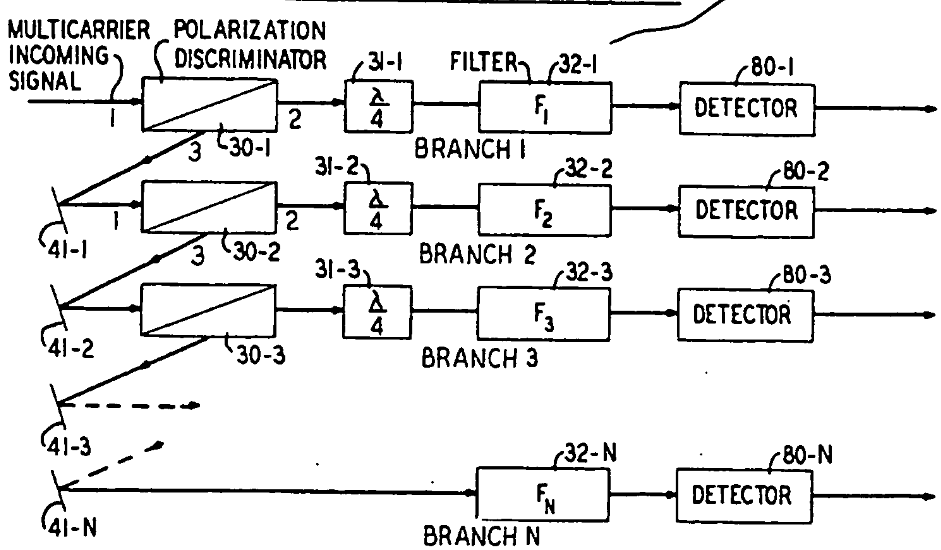
FIG. 4



double ~~band~~ side band filter

FIG. 5

FREQUENCY-DIVISION DEMULTIPLEXER



INVENTOR
O. E. DE LANGE
BY Lyman Sherman
ATTORNEY

ndpass filter and
detector are included.

Detailed Description Text - DETX (29):
In a single-sideband subcarrier system, **bandpass filters** 32 will be tuned to one of the sidebands, F.sub.i .+-. F.sub.s, for the reasons explained hereinabove. ~~In a double-sideband subcarrier system, filters 32 must be wide enough to pass both subcarrier sidebands.~~

Detailed Description Text - DETX (30):
FIG. 6 shows an al

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102!

Claims 1, 2, 3, 12, 18

Node (171)

~~Note that~~ node is broad since ~~can be~~ it can be.

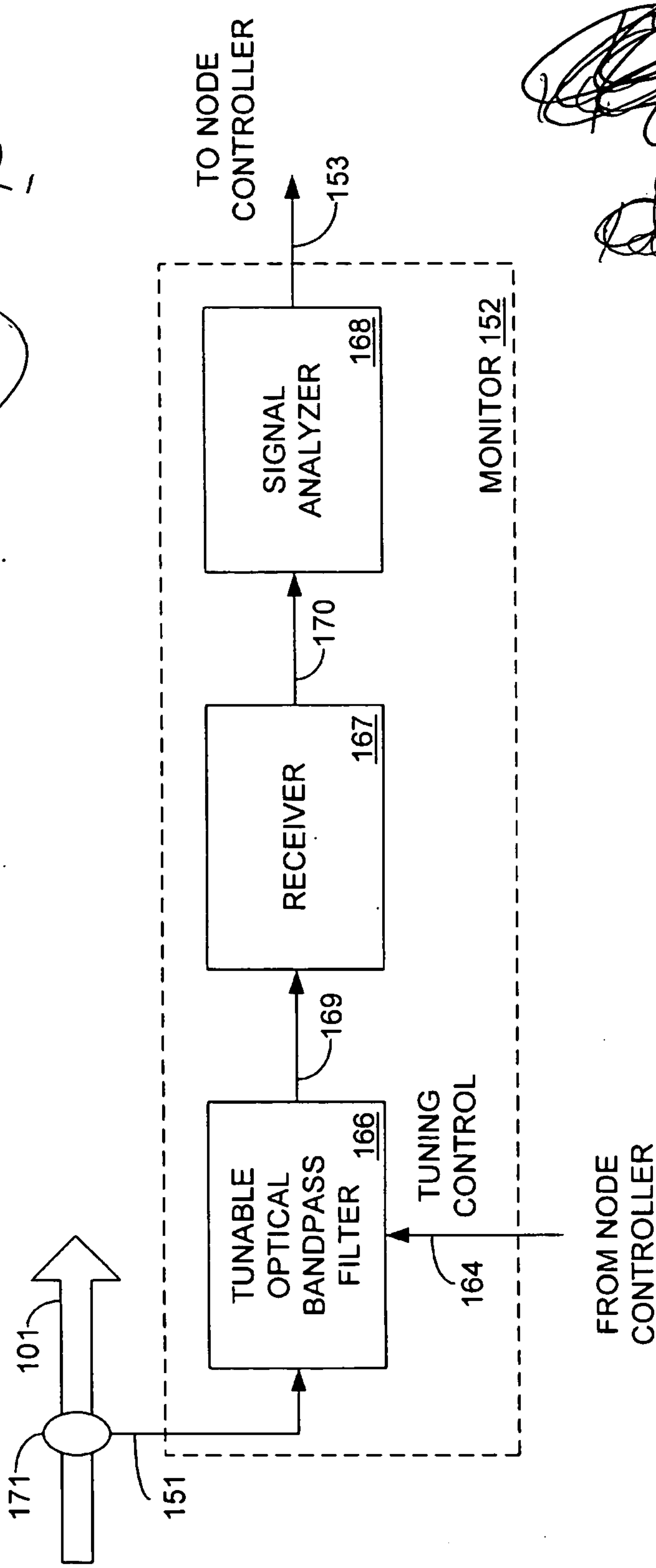

Fig. 2

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Detailed Description Text - DETX (20):

FIG. 2 is a block diagram illustrating the monitor 152 of FIG. 1. When commanded by the node controller 150 of FIG. 1, the monitor 152 analyzes the optical signal chosen by node controller 150, and determines whether this optical signal requires regeneration or equalization. Monitor 152 is connected to input fiber 101 via tap 171 and connection 151. Tap 171 removes a small amount of light from fiber 107 and directs this light through connection 151 to tunable optical bandpass filter 166. Tunable optical bandpass filter 166 is tuned by a tuning control signal 164 received from node controller 150 over connection 164. The tuning control signal 164 may be represented by an electrical, optical, or a mechanical signal. Tuning control signal 164 directs tunable optical bandpass filter 166 to pass one of the optical signals present on connection 151 to receiver 167 via connection 169 and to block all others. Tuning control signal 164 originates in node controller 150, which determines the wavelength of the optical signal that is to be passed by filter 166, and thus which optical signal is analyzed. The single optical signal output from filter 166 passes to receiver 167 via connection 169, where it is converted to an electrical signal